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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,668	02/26/2002	Scott R. Gremmert	H0002146	8676

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EXAMINER

AMSBURY, WAYNE P

ART UNIT PAPER NUMBER

2161

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/085,668	GREMMERT ET AL.	
	Examiner	Art Unit	
	Wayne Amsbury	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,13-18 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,13-18 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

CLAIMS 1-3, 5-7, 13-18 AND 22-26 ARE PENDING

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Applicant's arguments filed 12/15/05 have been fully considered but they are not persuasive.

The Response is directed largely to the after final amendment entered with the RCE of 3/2/06, wherein the request for terrain elevation information is automatically generated, and it is argued that the applied prior art does not teach this feature.

This argument is not persuasive because: (a) the generation of the request is moot in regard to the response of the system receiving it unless the receiver can detect some distinction, and (b) as noted in the Advisory Action, Gia does teach this feature. In particular, a real-time flight path panning algorithm can be embedded in a Flight Management Computer [COL 10 line 63 to Col 12 line 1], in order to react to changes in flight altitude [COL 10 lines 19-28].

3. Claims 1-3, 5-7, 13-18 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lancaster et al (Lancaster), US 6,229,6546, 8 May 2001 and Gia, US 6,317,690, 13 November 2001.

Lancaster is related to rapid generation of a terrain model [COL 1 line 65 to COL 2 line 5].

As to **claim 1**:

A method of providing terrain elevation information to multiple users

Lancaster teaches the use of a method directed to elevation data available over the Web [COL 2 lines 6-15; COL 3 lines 13-26] and thus to multiple users.

receiving a request at a server for terrain elevation information from one of multiple requestor devices remotely located from the server with parameters indicating location and at least one of the size resolution, and type of terrain data required;

extracting requested terrain elevation information from a database of terrain data, the database being associated with the server

The query processor of Lancaster may be coupled to a 3-D world model obtained via the Internet [COL 3 lines 1-12], which corresponds to receiving a request at a server from devices remotely located from the server. It is elevation data that is extracted in response to a request [COL 2 lines 6-15], although it may be combined with other data [COL 3 lines 16-24]. Several types of terrain data are noted by Lancaster [COL 2 lines 10-15 and lines 33-45]. Since such objects are placed in specific geographic coordinates [COL 2 lines 45-52], a parameter indicating location is inherently involved. Such parameters are also specified by geographical bounds of the target region [COL 3 lines 40-45].

transforming the extracted terrain elevation information formatted in a grid of values representing specific elevation characteristics; and

Lancaster transforms the extracted terrain data into an intermediate format extracted from the user query [COL 2 lines 10-15]. However, Lancaster does not specifically format the information into a **grid**. Lancaster does provide for optimizing data in a particular format for display [COL 2 lines 10-16] and merging any bitmap file at the users discretion [COL 3 lines 49-52].

Official Notice is taken that it was well known at the time of the invention to format terrain data in the form of a grid, and in particular, a grid that displays specific elevation data. Gia, FIG 12, provides evidence for this. Gia is directed to an application of terrain data processing [COL 1 lines 8-12].

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide for formatting the terrain data of Lancaster in a grid as taught by Gia because it is an effective form from which a visual image of a geographic area may be generated.

sending the formatted terrain elevation information to one of the multiple requester devices,

wherein the request is automatically generated by one of he multiple requestor devices.

The response to the query can be stored as specified by the requestor [COL 3 lines 53-59].

In more detail: (a) the generation of the request is moot in regard to the response of the system receiving it unless the receiver can detect some distinction, and (b) as noted in the Advisory Action, Gia does teach this feature.

In particular, a real-time flight path panning algorithm can be embedded in a Flight Management Computer [Gia COL 10 line 63 to Col 12 line 1], in order to react to changes in flight altitude [Gia COL 10 lines 19-28].

As to **claim 2**, the user control of at least vertical exaggeration [COL 3 line 49] and geographical corner bounds [COL 3 lines 44-45] corresponds to scaling the extracted terrain elevation information.

As to **claim 3**, the user is provided the option of interactively customizing such parameters as the geographical extents and the application of bitmap overlays and terrain skins [COL 8 lines 19-47], which corresponds to modifying an orientation.

As to **claim 5**, the elements noted above correspond to process control criteria, as does the ability to merge any bitmap file at the users discretion [COL 3 lines 49-52], and to navigate among source documents including web sites [COL 3 lines 13-27].

It would have been obvious to one of ordinary skill in the art at the time of the invention to route responses to particular users on the Web and to route resource data on the Internet because the routes depend on both source and target and the particular request that initiates the request for data.

As to **claim 6**, the user can at least route the response to a particular storage path [COL 3 lines 53-59].

As to **claim 7**, Lancaster teaches the use of multiple source files [COL 7 lines 39-53], as well as merging a bitmap overlay as noted above. The process of combining data sources inherently requires comparisons, at least in order to align them.

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The claim does not specify any result of comparison, and thus this corresponds to the comparison of the claims.

Gia teaches that a terrain modeling requires sufficient accuracy to allow terrain reference tasks to be performed efficiently [Gia COL 10 lines 31-35], (and that his Oct-tree system does do that). It is also noted that resolution is a form or either.

The elements of **claims 13-18 and 22-26** are rejected in the analysis above and these claims are rejected on that basis.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Amsbury whose telephone number is 571-272-4015. The examiner can normally be reached on M-F 6-18:30 FIRST WEEK.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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WPA


WAYNE AMSBURY
PRIMARY PATENT EXAMINER